of diseases, and in the concluding chapter are discussed the future prospects of medical science, the probable extent of our power over disease, the American French and English schools of observation. It is apparent even from so brief and imperfect a statement of the contents of Dr. Bartlett's book, how much ground he goes over. It is not our purpose to follow him, nor to criticise minutely the views and opinions advanced by him. To do this, and to be just to the subject and the author, would not be possible in the prescribed limits. We can only imitate the traveler, who, after the completion of his tour, commits to writing some of the impressions produced on his own mind, with the thoughts suggested to him by the scenes and circumstances amongst which he has been thrown. Our readers may perhaps judge in this way as easily, whether it be worth their while to go over the same ground as after a more elaborate description. Of course, all will not find that Dr. Bartlett has surveyed the field of medical science from their own favourite points of view. His volume is but an octavo of some three hundred pages, and such a subject as the philosophy of medical science cannot be exhausted in that space. Yet whatever faults of omission or commission may be detected by the critical reader, we are persuaded that no man of an honest or candid mind will regret the time spent in making himself acquainted with the author's views. No one can proceed far in the perusal of the work without being convinced that the writer has thought much and well, and has expressed himself clearly and forcibly. The book is a credit to the medical literature of our country, and for the sake of the profession we hope that it will meet with a wide circulation.

G. C. S.

ART. XV.—*General Report of the Royal Hospitals of Bridewell and Bethlem, and of the House of Occupations, for the year ending* 31*st December*, 1844. London, 1845: pp. 112.

DURING the last few years the Bethlem Hospital for the Insane has made gigantic strides in the way of improvement. It now undoubtedly deserves to be classed among the very best of pauper institutions for the treatment of mental disorders. The extended notice which we gave of the report for 1843 precludes the necessity of entering at length into the details of that which is now before us. The following table includes the most important statistics for the year:

	CURABLES.			INCURABLES.			CRIMINALS.			TOTALS.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
In hospital January 1st. 1844, - -	72	109	181	34	50	84	70	20	90	176	179	355
Admitted during the year, - - -	118	168	286	5	3	8	10	1	11	133	172	305
Whole number, - - - - -	190	277	467	39	53	92	80	21	101	309	351	660
Discharged cured, - - - -	58	70	128	0	0	0	2	2	4	60	72	132
Died, - - - - - - - -	6	13	19	1	3	4	5	0	5	12	16	28
Remaining December 31st, 1844, -	77	114	191	37	50	87	73	19	92	187	183	370

Patients admitted during 100 years, ending Dec. 31st, 1843, 17,803.
" discharged cured, " " " " 7,108, or 39·86 pr. ct.
" died, " " " " 1,799, or 10·10 pr. ct.

	Males.	Females.	Totals.
Curable cases admitted during the last 25 years, -	2,180	3,221	5,408
" cured " " " -	1,021	1,715	2,736
" died " " " -	132	146	278
Per centum of cures, - - - - - - -	46·83	53·12	50·59
" of deaths, - - - - - - -	6·05	4·52	5·12

Hence it appears that the recoveries, *in cases considered as curable*, was a fraction more than 50 per cent. The question is often asked, whether the patients of one sex are more curable than those of the other? The cures of females, according to this table, exceeded those of males by 6·29 per cent.

The facilities for the moral treatment of the patients at Bethlem have been increased, and a regular system of labour is so far introduced that about *two-thirds* of the patients are constantly employed.

"Personal restraint," says the report, "has been reduced to one-tenth of what it was six years ago; and it is most gratifying to be able to state, that it has been reduced during this year to one-half of what it was in 1843."

"It is almost unnecessary to say that restraint has diminished just as the means of occupation and amusement have been increased, and that without such means and appliances it would be injudicious to attempt to dispense with mechanical restraint."

In the diminution of restraining apparatus to the minimum required by true philanthropy; in the establishment of a system of regular manual labour; and last, though perhaps least, in the publication of an elaborate report in a style indicative of the perfection of art, the government of Bethlem hospital has set an example which, it is to be hoped, will be followed by those concerned in the management of other kindred institutions. P. E.

ART. XVI.—*Vital Chemistry.—Lectures on Animal Heat.* By THOMAS SPENCER, M.D., Professor of the Institutes and Practice of Medicine in the Medical Institute of Geneva College. 12mo., pp. 114. Geneva, 1845.

SINCE the attention of physiologists has been directed to the subject of vital chemistry, and its agency in the production of the phenomena of organic life, by the promulgation of the ingenious, and from their simplicity and apparent truthfulness, very captivating theories of Liebig, we have been presented with several publications, in which attempts are made to explain, upon purely chemical principles, the functions of digestion, chylosis, hæmatosis, and nutrition.

The examination of the laws and products of vital chemistry is unquestionably calculated to lead to very important results, provided it be conducted in a right spirit, and with a constant recollection that the changes, whether of composition or decomposition, which take place in the living organism, although governed by strictly chemical laws, are nevertheless under the control of life, in whatever we may suppose this latter to consist; and that, although chemical changes act a very important part in the production of the organic phenomena, they are not the sole cause of these phenomena, and are, to a very great degree, directed and controled by the vitality of the organism; and hence, that the laws and results of vital chemistry are to be studied, not in the laboratory, but in the living body alone.

The work of Dr. Spencer, the object of which is to investigate the vital chemistry of respiration and hæmatosis generally, with a view to determine the source of animal heat, is one deserving of a close study. His manner of investigating the subject is perfectly logical, so that, admitting the accuracy of his premises, most of his conclusions necessarily follow. We have only to regret that he has been urged into a somewhat hasty publication of his views; that he has not taken time to elaborate them more fully, to fortify, with more numerous facts and illustrations, his several positions, and to fill up and complete the mere sketch which he has now presented. He would, in this manner, have done greater justice to himself, and succeeded more fully in convincing his readers of the truth of his views.

To give a general idea of Dr. Spencer's theory of animal heat, we present his conclusions, as drawn up by himself.

"The following summary may be presented of the reciprocal chemical changes of the blood in the capillaries of the lungs and system, and the *connection* of respiration with calorification:

"1. The lungs perform an excretal office, on which life constantly depends, because directly and indirectly aiding calorification.

"2. The substance thrown off is hydrate of carbon.

"3. The carbon, on coming in contact with atmospheric oxygen, combines with